



54  
**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,248	08/01/2000	Masaaki Oka	WINX-55325	8369

24201 7590 06/04/2003

FULWIDER PATTON LEE & UTECHT, LLP  
HOWARD HUGHES CENTER  
6060 CENTER DRIVE  
TENTH FLOOR  
LOS ANGELES, CA 90045

EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
----------	--------------

2671

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/630,248

Applicant(s)

OKA ET AL.

Examiner

Scott Wallace

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-8 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-8 and 24-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's arguments, see page 6 (the selected pattern is commonly used in the memory access), filed 03/21/03, with respect to the rejection(s) of claim(s) 5-6 and 25-26 under 102b have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Egan.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5-6, 8, 24-26, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al., U.S. Patent No. 5,251,296 in view of Egan, U.S. Patent No. 6,222,561.

3. As per claims 5 and 25, Rhoden et al discloses an apparatus comprising:

A processor for generating coordinate data specifying a desired primitive (column 4 lines 15-20);

A pixel generator for generating pixel data of the desired primitive (column 4 lines 15-22 and 33-36);

A control circuit for specifying a shape of an optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 1-35);

An accessing unit for accessing a memory and storing the pixel data generated by the pixel generator into the memory according to an optimal pixel pattern (column 4 lines 33-36);

A control circuit for specifying a shape of the optimal pixel pattern according to the coordinate data generated by the processor (column 4 lines 15-22 and 33-36) such that the accessing unit stores the pixel data into the memory with the minimum number of times of accessing the memory (column 2 lines 54-61).

However, Rhoden et al does not specifically disclose under the condition that the optimal pixel pattern in a first access of the memory is commonly used in a subsequent access of the memory. This is disclosed in Egan in column 1 lines 45-60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to access the same pixel pattern as in Egan with the system of Rhoden et al because this renders the primitive effectively in as many blocks of  $n \times m$  pixels as is required.

4. As per claims 6 and 26, Rhoden et al discloses wherein the control circuit specifies the shape of the optimal pixel pattern by selecting one pixel pattern from a plurality of pixel patterns according to the coordinate data, the plurality of pixel patterns being different in shape from each other and each of the plurality of pixel patterns having the same number of pixels (column 6 lines 5-20).

5. As per claim 8, Rhoden does not specifically disclose a video game comprising the apparatus according to claim 5. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Rhoden with the a video game system because this would have allowed the graphics simulations to perform more quickly and with increased detail (column 1 lines 18-27).

6. As per claim 24, Rhoden et al discloses wherein the control circuit detects at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and for outputting pixel pattern information indicating the desired at least one pixel

pattern; and said accessing unit accesses the memory according to the pixel pattern information and stores the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

7. As per claim 28, Rhoden et al discloses further comprising: a step of detecting, of plural pixel patterns formed on a predetermined coordinate area including the coordinate data (column 6 lines 5-20), at least one pixel pattern through which the accessing unit is allowed to access the memory and store the pixel data of the desired primitive, and outputting pixel pattern information indicating the detected at least one pixel pattern (column 4 lines 15-23); and said step of accessing comprising accessing the memory according to the pixel pattern information (column 2 lines 54-61), and comprising storing the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data (column 4 lines 15-23 and 33-36).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoden et al. in view of Egan, U.S. Patent No.6,222,561 in further in view of May, U.S. Patent No. 5,815,168.

10. As per claims 7 and 27, Rhoden et al and Egan does not specifically disclose wherein the control circuit calculates an aspect ratio of the desired primitive based on the coordinate data and specifies the shape of the optimal pixel pattern according to the aspect ratio. However, May discloses this in column 3 lines 42-49. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to use the aspect ratio of May with the system of Rhoden because this would provide optimal performance depending on the shape of the image (column 3 lines 42-49).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at 703-305-9798.

**Any response to this action should be mailed to:**


Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
**MARK ZIMMERMAN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

**Application/Control Number: 09/630,248**  
**Art Unit: 2671**

**Page 6**